

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph appearing at page 1, lines 13-18, with the following amended paragraph:

B1
It has been elucidated that thioredoxin reductase has activity of reductively cleaving a disulfide bond of a target protein in the presence of NADPH and thioredoxin, as well as a variety of other physiological activities. Thioredoxin, a substrate for thioredoxin reductase, is a protein containing ~~having~~ two thiol groups in the molecule, and functions also as a ~~proton~~ hydrogen donor in reduction of ribonucleotide by ribonucleotide reductase.

Please replace the paragraph appearing at page 2, lines 7-10, with the following amended paragraph:

B2
The present invention thus provides a substrate for thioredoxin reductase which ~~comprise~~ comprises a substance selected from the group consisting of a compound represented by the following general formula ~~(I) or (I')~~ (I) or (I') and a physiologically acceptable salt thereof, and a hydrate thereof and a solvate thereof:

Please replace the paragraph appearing at page 8, lines 12-27, with the following amended paragraph:

B3
Therefore, administration of the substrate of the present invention as a medicament to a mammal including a human can ~~enhances~~ enhance the peroxidase reaction proceeded by the thioredoxin reductase in vivo. As a result, peroxidation of substances in vivo can be prevented or

P21480.A08

peroxides in vivo can be reduced, thereby homeostasis of oxidation-reduction state of thiol proteins and thiol compounds in vivo can be maintained. The medicament comprising the substrate of the present invention as an active ingredient is useful for the preventive and/or therapeutic treatment of diseases caused by abnormal regulation of intracellular oxidation-reduction and diseases with abnormal regulation of intracellular oxidation/reduction (Mattson, M.P et al., Nature, 382, pp.674-675, 1996). Examples of such diseases include, for example, ischemic organ diseases (brain, heart, liver, kidney, digestive organs and the like), nerve degenerative diseases caused by inappropriate apoptosis induction (Alzheimer's disease, Parkinson's disease, Huntington's chorea, familial amyotrophic lateral sclerosis [ALS], AIDS and the like), radiation injury, malignant tumor (leukemia etc.), and various inflammatory diseases and endotoxin shock.

P3
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